

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously presented) An intravascular balloon catheter comprising:
a catheter body having a proximal end, a distal end, a guidewire lumen, and an axially slit passage along at least a portion thereof; and
a first balloon structure comprising a balloon and a passage slidably receivable over the catheter body and an inflation tube removably receivable in the axially slit passage.

Claim 2 (cancelled).

3. (Original) An intravascular balloon catheter as in claim 1, wherein a perimeter of the catheter body has a circular, oblong, or elliptical shape.

4. (Original) An intravascular balloon catheter as in claim 1, wherein the distal end of the catheter body is axially tapered for a length of at least 3 mm.

5. (Original) An intravascular balloon catheter as in claim 1, further comprising an atraumatic tip at the distal end of the catheter body.

6. (Original) An intravascular balloon catheter as in claim 1, wherein the catheter body is formed from a polymer material, a composite material, a braided material, or a metal material.

7. (Original) An intravascular balloon catheter as in claim 1, wherein the catheter body comprises multiple tubular members coupled to one another.

8. (Previously presented) An intravascular balloon catheter as in claim 1, wherein the inflation tube extends proximally from the balloon when the balloon is disposed near the distal end of the catheter body.

9. (Original) An intravascular balloon catheter as in claim 8, wherein the inflation tube has sufficient column strength to advance the balloon structure over the catheter body.

Claims 10-11 (cancelled).

12. (Original) An intravascular balloon catheter as in claim 8, wherein the inflation tube has a length in the range from 10 cm to 150 cm.

Claims 13-14 (cancelled).

15. (Original) An intravascular balloon catheter as in claim 1, wherein the catheter body is substantially free from structure at the proximal end which would interfere with passage of the balloon structure over the proximal end of the catheter body.

16. (Original) An intravascular balloon catheter as in claim 1, further comprising an expandable vascular prosthesis disposed over the first balloon structure.

17. (Original) An intravascular balloon catheter system comprising a balloon catheter as in claim 1, further comprising a second balloon structure having a passage which is slidably receivable over the catheter body.

18. (Original) An intravascular balloon catheter system as in claim 17, further comprising an expandable vascular prosthesis disposed over the second balloon structure.

19. (Original) An intravascular balloon catheter as in claim 1, wherein the catheter body is axially slit over at least a portion of the length of the guidewire lumen.

Claims 20-21 (cancelled).

22. (Original) An intravascular balloon catheter as in claim 1, wherein the catheter body has a length in the range from 50 cm to 200 cm, and outer diameter in the range from 1 F to 10 F, and a guidewire lumen diameter in the range from 0.2 mm to 2 mm.

23. (Original) An intravascular balloon catheter as in claim 1, wherein the balloon structure further comprises an inner sleeve having an inflatable balloon disposed over an outer surface of the inner sleeve, wherein the passage is formed axially in the inner sleeve.

24. (Original) An intravascular balloon catheter as in claim 23, wherein the inner sleeve has a length in the range from 3 cm to 50 cm and the inflatable balloon has a length in the range from 1 cm to 5 cm.

25. (Original) An intravascular balloon catheter as in claim 23, wherein at least a portion of the inner sleeve is slidably receivable over the catheter body.

26. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising a deployable embolic capture element on the catheter body.

27. (Withdrawn) An intravascular balloon catheter as in claim 26, wherein the deployable embolic capture element is located within 20 cm of the distal end of the catheter body.

28. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising a deployable embolic capture element on the first balloon structure.

29. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising a second balloon on the catheter body.

30. (Withdrawn) An intravascular balloon catheter as in claim 29, further comprising an expandable vascular prostheses disposed over the second balloon.

31. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising a self-expanding vascular prosthesis on the catheter body.

32. (Withdrawn) An intravascular balloon catheter as in claim 31, wherein the vascular prosthesis is distal the balloon structure in an unexpanded state.

33. (Withdrawn) An intravascular balloon catheter as in claim 31, wherein the vascular prosthesis is at least partially under the balloon structure in an unexpanded state.

34. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising an atherectomy element coupled to the distal end of the catheter body.

35. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising at least one pressure sensor coupled to the distal end of the catheter body.

36. (Withdrawn) An intravascular balloon catheter as in claim 1, further comprising at least one infusion port at the distal end of the catheter body.

Claim 37-52 (cancelled).